		ELECTRICAL F	PLAN SYM	BOLS	
	THIS IS A COMPREHENSIVE SYMB	OL SCHEDULE. NOT ALL SYMBOL	S ARE APPLICABLE TO	THESE DRAWINGS	
SYMBOLS	DESCRIPTION	MOUNTING HEIGHT TO CENTER OF DEVICE UNLESS OTHERWISE INDICATED	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT TO CENTER OF DEVICE UNLESS OTHERWISE INDICATED
<u>(</u> )	CEILING-MOUNTED JUNCTION BOX		<b>\( \)</b>	SINGLE-PHASE OR THREE-PHASE MOTOR (REFERENCE ONE-LINE DIAGRAM OR PANELBOARD SCHEDULE FOR WIRING AND CONTROL REQUIREMENTS)	
F)	WALL JUNCTION BOX		4	NON-FUSED DISCONNECT SWITCH (30A/3P UON)	
\$	SWITCH: SINGLE POLE (HORSEPOWER RATED WHEN USED AS MOTOR DISCONNECT)	48 INCHES		CONDUIT CONCEALED IN WALL OR CEILING, QUANTITY OF CONDUCTORS NOT SHOWN, PROVIDE AS REQUIRED FOR DEVICE/CIRCUIT NUMBERS SHOWN.	
$\Leftrightarrow$	DUPLEX RECEPTACLE HOSPITAL GRADE, 20A-125V; 2P-3W-G; NEMA 5-20R	18 INCHES	L1-2,4,6	HOME RUN TO PANELBOARD, QUANTITY OF CONDUCTORS REQUIRED NOT INDICATED,	
	SINGLE POINT CONNECTION		(	PROVIDE QUANTITY AS REQUIRED FOR CIRCUIT NUMBERS SHOWN, SWITCHING ARRANGEMENT, OR NUMBER OF HOME RUNS SHOWN.	
☑ DPD	DUCT PHOTOELECTRIC DETECTOR		////	HASH MARKS INDICATE ITEM NOTED TO BE REMOVED	
ss	LOW AIR SUPERVISORY SWITCH		1	NOTE IDENTIFICATION	
C	COMBINATION FIRE/SMOKE DAMPER BY DIVISION 23				
M	MOTORIZED DAMPER				

**ABBREVIATIONS** MAIN LUGS ONLY ABOVE COUNTER METAL OXIDE VARISTOR AMPERES FUSE OR AMPERES FRAME MOTOR PROTECTION RELAY ABOVE FINISHED FLOOR MULTI-RATIO AIR HANDLING UNIT MOUNTED AMPERES INTERRUPTING CAPACITY MEGAVOLT AMPERES ALUMINUM (LIGHTING PROTECTION SYSTEM ONLY) ALUM NEUTRAL OR NORMAL POWER (POLE OF ATS) AMPERES PLUG ARCH NORMALLY CLOSED ARCHITECTURAL NATIONAL ELECTRICAL CODE AMPERES TRIP NATIONAL ELECTRICAL MANUFACTURERS ASSN AUTOMATIC TEMPERATURE CONTROL NEMA AUTOMATIC TRANSFER SWITCH NICKEL-CADMIUM AWG BMCS BF AMERICAN WIRE GAUGE NORMALLY OPEN BUILDING MANAGEMENT CONTROL SYSTEM BALLAST FACTOR NOT TO SCALE BLDG BUILDING OVERCURRENT, ON CENTER OVERCURRENT PROTECTIVE DEVICE OUTER DIAMETER CIRCUIT BREAKER ORIGINAL EQUIPMENT MANUFACTURER CLF COAX CONT COORD **CURRENT LIMITING FUSE** OWNER-FURNISHED, CONTRACTOR INSTALLED OWNER-FURNISHED, OWNER INSTALLED CONTINUATION OVERHEAD OVERHEAD PAGING SYSTEM COORDINATE CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE COTR CONTROL PANEL PUBLIC ADDRESS (OVERHEAD PAGING SYSTEM) CONTROL POWER TRANSFORMER PAD-MOUNTED CURRENT TRANSFORMER PARABOLIC CTR CONTROLLER POWER DISTRIBUTION CENTER(UNIT SUBSTATION) POWER FACTOR DET DETAIL POWER FACTOR CORRECTION CAPACITOR DIV DPDT DPST DOUBLE POLE, DOUBLE THROW PASSIVE INFRARED DOUBLE POLE, SINGLE THROW PROGRAMMABLE LOGIC CONTROLLER DWG PANEL, PANELBOARD EMERGENCY POWER (POLE OF ATS) PROVIDE P.O.S. POINT OF SALE POTENTIAL TRANSFORMER EMPTY CONDUIT EQUIPMENT GROUND POLYVINYL CHLORIDE **PVC-RGS** PVC-COATED RGS CONDUIT ELECTRIC(AL) ELECTRICÀL METALLIC CONDUIT **ELECTRONIC NEWS GATHERING** REFER TO, REFERENCE, REGARDING RE, REF ELECTRONIC WATER COOLER EXIST,EXG EXISTING RIGID GALVANIZED STEEL ROOM FREQUENCY, FAHRENHEIT ROOT MEAN SQUARED REDUCED-VOLTAGE AUTO-TRANSFORMER FOOT-CANDLE, FOOT-CANDLES FULL LOAD AMPERES SUPERVISORY CONTROL AND DATA ACQUISITION FVNR FULL VOLTAGE NON-REVERSING SCADA SCHEDULE, SCHEDULED FVR FULL VOLTAGE, REVERSING SCHEM SCHEMATIC G, GND GFCI,GFI SERVICE ENTRANCE GROUND FAULT CIRCUIT INTERRUPTER GENERAL PURPOSE SHIELDED SURGE PROTECTION DEVICE HID HIGH INTENSITY DISCHARGE SINGLE POLE, DOUBLE THROW HAND-OFF-AUTOMATIC HOA SINGLE POLE, SINGLE THROW HORSEPOWER HIGH PRESSURE SODIUM STAINLESS STEEL SYMMETRICAL SHORT CIRCUIT CURRENT AVAILABLE HEATING, VENTILATION, & AIR CONDITIONING SSCCA SSOL SSS SOLID STATE OVERLOAD INTERRUPTING CAPACITY SOLID STATE STARTER STD STANDARD INNER DIAMETER INTERMEDIATE DISTRIBUTION FRAME STATION SHIELDED TWISTED PAIR ISOLATED GROUND INPUT/OUTPUT SWITCH SWBD SWITCHBOARD SWGR SYM JUNCTION BOX SWITCHGEAR SYMMETRICAL KILO. THOUSAND SYNCH SYNCHRONOUS KILOAMPERES TELECOM TELECOMMUNICATIONS THOUSAND AMPS INTERRUPTING CAPACITY TWISTED SHIELDED PAIR THOUSAND CIRCULAR MILS THERMAL OVERLOAD KVA KILOVOLT AMPERES TRANSIENT VOLTAGE SURGE SUPPRESSOR KILOWATT KILOWATT-HOUR DEMAND KWHD UNDERGROUND UNDERWRITERS LABORATORY LOAD POLE OF ATS UNLESS OTHERWISE NOTED LIGHTING CONTROL PANEL UNINTERRUPTIBLE POWER SUPPLY LIGHT EMITTING DIODE LONG TIME, INSTANTANEOUS, GROUND FAULT UNDERGROUND SERVICE ENTRANCE UNSHIELDED TWISTED PAIR LOCAL-REMOTE LOCKED ROTOR AMPERES EMERGENCY LIFE SAFETY POWER VETERAN'S ADMINISTRATION LONG TIME, SHORT TIME, GROUND FAULT LONG TIME, SHORT TIME, INSTANTANEOUS, VOLTS-AMPERE VOLTS ALTERNATING CURRENT GROUND FAULT LTG VOLTS-AMPERE REACTIVE VARIABLE AIR VOLUME VOLTS DIRECT CURRENT VARIABLE FREQUENCY DRIVE MILLI AMP MAXIMUM VARIABLE RISE SEAT MAIN CIRCUIT BREAKER MCB MOTOR CONTROL CENTER MOLDED CASE CIRCUIT BREAKER MAXIMUM CONTINUOUS OPERATING VOLTAGE WIRELESS ACCESS POINT MOTOR CIRCUIT PROTECTOR WIRELESS DURESS SYSTEM REPEATER MAIN DISTRIBUTION FRAME WEATHERPROOF XFMR TRANSFORMER MANUFACTURER. MANUFACTURER'S MFR TRANSMITTER MANHOLE, METAL-HALIDE XSTN TRANSITION MIN MINIMUM IMPEDANCE

## GENERAL ELECTRICAL NOTES (APPLY TO ALL DRAWINGS):

- A. ALL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODES, NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA) STANDARDS, TIA/EIA STANDARDS. UNDERWRITER LABORATORIES, INC. (UL) LISTINGS, APPLICABLE LOCAL AND REGIONAL CODES, AND VA REQUIREMENTS AND STANDARDS.
- B. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THIS PROJECT ON BEHALF OF THE VA. REFERENCE SPECIFICATION SECTIONS 260511 AND 260512 FOR ADDITIONAL REQUIREMENTS.
- C. CONTRACTOR SHALL RECOGNIZE THAT PROJECT SCOPE INCLUDES ALL PROJECT CONTRACT DOCUMENTS (DRAWINGS AND SPECIFICATIONS). THE DRAWINGS AND SPECIFICATIONS SHALL BE TAKEN TOGETHER AS ONE. CONTRACTOR SHALL SHALL PROVIDE WORK SPECIFIED AND NOT INDICATED OR WORK INDICATED AND NOT SPECIFIED AS THOUGH MENTIONED IN BOTH.
- D. CONTRACTORS ARE TO COORDINATE ALL WORK WITH THE VA COTR. CLEAN ALL DEBRIS FROM THE CONSTRUCTION SITE TO THE SATISFACTION OF THE VA COTR. REFERENCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- E. GROUND: CONTINUITY OF GROUND THROUGHOUT THE SYSTEM SHALL BE PROVIDED. SYSTEM GROUND TO COMPLY WITH NEC REQUIREMENTS. RACEWAY SHALL NOT BE RELIED UPON FOR SOLE EQUIPMENT GROUNDING MEANS. ALL RACEWAY (CONDUIT, CABLETRAY, SURFACE RACEWAY, ETC) SHALL HAVE CONTINUOUS GROUND THROUGHOUT RACEWAY SYSTEM, SIZE PER NEC. CONTRACTOR SHALL ENSURE AND CONDUCT ALL PERFORMANCE CRITERIA AND TESTING OF GROUNDING SYSTEM PER NFPA. REFERENCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- F. CONTRACTOR SHALL REPLACE ANY ACOUSTICAL CEILING TILES, PORTIONS OF THE SUSPENSION SYSTEM OR EXPOSED GRID SYSTEM DAMAGED BY HIS WORK.
- G. ALL CONDUIT PENETRATING FIRE WALLS, FIRE BARRIERS, SMOKE BARRIERS, OR FIRE PARTITIONS SHALL COMPLY WITH APPLICABLE BUILDING CODES AND SHALL BE SEALED TIGHT WITH AN APPROVED FIRE STOP SEALANT RESTORING THE WALL/BARRIER/PARTITION TO ITS ORIGINAL RESISTANCE, SEE SECTION 078400. UNLESS OTHERWISE NOTED ON DRAWINGS, ALL WALL, CEILING, AND FLOOR SLAB PARTITIONS SHALL BE CONSIDERED AS FIRE RATED PATCHED ACCORDINGLY.
- H. ALL ELECTRICAL CONDUIT SHALL BE CONCEALED IN WALLS OR CEILINGS IN FINISHED AREAS.
- I. BRANCH CIRCUITS SHALL BE MINIMUM #12 CONDUCTOR AND 3/4" CONDUIT. UPSIZE CONDUIT/CONDUCTORS FOR OCPD, VOLTAGE DROP, ETC AS REQUIRED BY THE NEC AND VA SPECIFICATIONS AND REQUIREMENTS.
- J. REFERENCE MECHANICAL DRAWINGS AND SPECIFICATIONS FOR WORK PHASING AND CONSTRUCTION CONTROLS
- K. FOR THE DEMOLITION PLANS, NOT ALL ELECTRICAL ITEMS REQUIRING DEMOLITION MAY BE SHOWN. VISIT SITE BEFORE BIDDING AND BECOME FAMILIAR WITH WORK REQUIRED.
- L. CONTRACTOR SHALL BE COGNIZANT THAT MULTIPLE BUILDING SYSTEMS TIE INTO EXISTING CAMPUS SYSTEMS (PRIMARY ELECTRICAL, FIRE ALARM, DATA/TELECOMM, ETC) AND AS SUCH LOCATIONS AND CONDITIONS OF EXISTING ELECTRICAL EQUIPMENT SHOWN SHALL BE FIELD VERIFIED. CONTRACTOR SHALL MAKE ALLOWANCES IN THEIR BID FOR ACTUAL CONDITIONS, DEMOLITION AND CONSTRUCTION FOR THIS PROJECT SHALL BE PERFORMED IN PHASES IN ORDER TO MAINTAIN OPERATION OF ALL CAMPUS BUILDINGS AND SYSTEMS. ANY WORK THAT WOULD RESULT IN MINOR BUILDING INTERRUPTIONS SHALL BE SUBMITTED TO THE VA COR FOR APPROVAL AT LEAST 48 HOURS PRIOR TO COMMENCING WORK. ANY WORK THAT WOULD RESULT IN A MAJOR OUTAGE IN A BUILDING SHALL BE SUBMITTED TO THE VA COR FOR APPROVAL AT LEAST TWO WEEKS PRIOR TO COMMENCING WORK. ALL BUILDING 86 ELECTRICAL SYSTEMS INTERRUPTIONS SHALL BE KEPT TO AN ABSOLUTE MINIMUM. REFERENCE SPECIFICATION SECTIONS 260511 AND 260512 FOR ADDITIONAL REQUIREMENTS.

## FOR CONSTRUCTION















